IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

SYNCPOINT IMAGING, LLC, Plaintiff, v. NINTENDO OF AMERICA INC.; NINTENDO CO., LTD; GAME X CHANGE, INC.; GAMES2GO; PIXART IMAGING, INC. Defendant**s**	Case No. 2:15-cv-00247-JRG-RSP

MEMORANDUM OPINION AND ORDER

Before the Court is the opening claim construction brief of SyncPoint Imaging, LLC ("Plaintiff") (Dkt. No. 143, filed on September 18, 2015),[1] the corrected response of Nintendo of America Inc., Nintendo Co., Ltd., and PixArt Imaging, Inc. ("Defendants") (Dkt. No. 156, filed on October 6, 2015), joined by Game XChange (Dkt. No. 177) and Games2Go (Dkt. No. 178), and the reply of Plaintiff (Dkt. No. 164, filed on October 9, 2015). The Court held a hearing on the issues of claim construction and indefiniteness on October 30, 2015. Having considered the arguments and evidence presented by the parties at the hearing and in their briefing, the Court issues this Order.

[1] Citations to the parties' filings are to the filing's number in the docket (Dkt. No.) and pin cites are to the page numbers assigned through ECF.

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I. BACKGROUND

Plaintiff alleges that Defendants have infringed U.S. Patent No. 6,275,214 (the "'214 Patent"). The '214 Patent is titled "COMPUTER PRESENTATION SYSTEM AND METHOD WITH OPTICAL TRACKING OF WIRELESS POINTER." The application that eventually issued as the '214 Patent was filed on July 6, 1999 and the '214 Patent was issued on August 14, 2001.

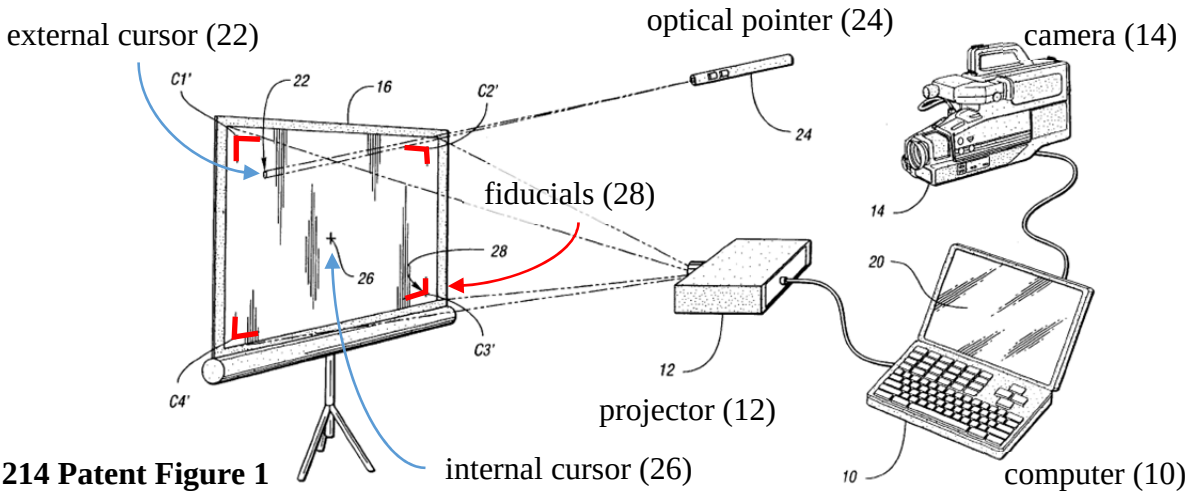
In general, the '214 Patent is directed to remotely controlling a computer using a cursor generated externally to the computer.

The abstract of the '214 Patent provides:

> A method for remotely controlling a computer having an associated screen for displaying output from the computer and having an internal cursor generated by the computer includes detecting at least one property of an external cursor relative to the screen and generating a command for the computer based on the at least one detected property of the external cursor. In one embodiment, the invention includes a computer connected to a projector which projects an image of the computer output onto an external screen. A camera is used to capture an image of the projected computer output. An optical pointer, such as a laser pointer, is used to generate and transmit an external cursor having various properties, such as color, shape, or intensity. The image captured by the camera is used to detect and process at least one property of the external cursor to generate a corresponding command or commands to control the computer. Commands may be used to emulate control of the computer typically provided by a pointing device such as a mouse or track ball.

The patent describes an exemplary embodiment of the invention with reference to Figure 1 which is reproduced below and annotated by the Court. Figure 1 shows a computer (10) that directs an image of its output (16) to a screen through a projector (12). A user then uses an optical pointer such as laser pointer (24) to position an external cursor (22) on the screen. A camera (14) captures the external cursor (22) and captures references to points of known locations (fiducials or reticles (28)). This allows the system to determine the position of the external cursor (22) with respect to the computer output. The computer moves a cursor generated

by the computer (the internal cursor) to align with the position of the external cursor relative to the computer's output. The properties of the external cursor, such as its shape, color, or pattern of



'214 Patent Figure 1

movement are determined and interpreted to generate commands. This is analogous to mouse clicks. The computer is thereby remotely controlled by the external pointer much as it could be locally controlled by a traditional mouse or a track pad.

Claims 1, 24, and 25, representative method, system, and *Beauregard* claims respectively, recite as follows:

1. A method for remotely controlling a computer having an associated screen for displaying output from the computer and having an internal cursor generated by the computer, the method comprising:

detecting at least one property of an external cursor and position of the external cursor relative to the output from the computer;

generating a command to move the internal cursor to a position on the screen corresponding to the position of the external cursor; and

generating a command for the computer based on the at least one detected property of the external cursor.

24. A computer presentation system for generating commands to remotely control a computer based on a plurality of user selectable properties of an optical cursor generated by a hand-held pointer and projected on a screen displaying output from the computer, the system comprising:

a camera for capturing an image of the output from the computer; and

a processor in communication with the camera for processing the image to detect position of the optical cursor and at least one property of the optical cursor and for converting the position and at least one property to corresponding commands to control the computer and move an internal cursor to a position corresponding to the optical cursor while the optical cursor remains within the output displayed on the screen.

25. A computer readable storage medium having stored data representing instructions executable by a computer to generate commands to control a cursor generated by the computer based on a plurality of user controllable properties of an external cursor, the computer readable storage medium comprising:

instructions for detecting at least one of the user selectable properties of the external cursor; and

instructions for generating a command for the computer based on the at least one detected property of the external cursor.

II. LEGAL PRINCIPLES

A. Claim Construction

"It is a 'bedrock principle' of patent law that 'the claims of a patent define the invention to which the patentee is entitled the right to exclude.'" *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quoting *Innova/Pure Water Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). To determine the meaning of the claims, courts start by considering the intrinsic evidence. *Id.* at 1313; *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 861 (Fed. Cir. 2004); *Bell Atl. Network Servs., Inc. v. Covad Commc'ns Group, Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001). The intrinsic evidence includes the claims themselves, the specification, and the prosecution history. *Phillips*, 415 F.3d at 1314; *C.R. Bard, Inc.*, 388 F.3d at 861. The general rule—subject to certain specific exceptions discussed *infra*—is that each claim term is construed according to its ordinary and accustomed meaning as understood by one of

ordinary skill in the art at the time of the invention in the context of the patent. *Phillips*, 415 F.3d at 1312–13; *Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.3d 1361, 1368 (Fed. Cir. 2003); *Azure Networks, LLC v. CSR PLC*, 771 F.3d 1336, 1347 (Fed. Cir. 2014) ("There is a heavy presumption that claim terms carry their accustomed meaning in the relevant community at the relevant time.") (vacated on other grounds).

"The claim construction inquiry . . . begins and ends in all cases with the actual words of the claim." *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1248 (Fed. Cir. 1998). "[I]n all aspects of claim construction, 'the name of the game is the claim.'" *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1298 (Fed. Cir. 2014) (quoting *In re Hiniker Co.*, 150 F.3d 1362, 1369 (Fed. Cir. 1998)). First, a term's context in the asserted claim can be instructive. *Phillips*, 415 F.3d at 1314. Other asserted or unasserted claims can also aid in determining the claim's meaning, because claim terms are typically used consistently throughout the patent. *Id.* Differences among the claim terms can also assist in understanding a term's meaning. *Id*. For example, when a dependent claim adds a limitation to an independent claim, it is presumed that the independent claim does not include the limitation. *Id*. at 1314–15.

"[C]laims 'must be read in view of the specification, of which they are a part.'" *Id*. (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc)). "[T]he specification 'is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.'" *Id*. (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)); *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002). But, "'[a]lthough the specification may aid the court in interpreting the meaning of disputed claim language, particular embodiments and examples appearing in the specification will not generally be read into the claims.'" *Comark*

Commc'ns, Inc. v. Harris Corp., 156 F.3d 1182, 1187 (Fed. Cir. 1998) (quoting *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988)); *see also Phillips*, 415 F.3d at 1323. "[I]t is improper to read limitations from a preferred embodiment described in the specification—even if it is the only embodiment—into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited." *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 913 (Fed. Cir. 2004).

The prosecution history is another tool to supply the proper context for claim construction because, like the specification, the prosecution history provides evidence of how the U.S. Patent and Trademark Office ("PTO") and the inventor understood the patent. *Phillips*, 415 F.3d at 1317. However, "because the prosecution history represents an ongoing negotiation between the PTO and the applicant, rather than the final product of that negotiation, it often lacks the clarity of the specification and thus is less useful for claim construction purposes." *Id.* at 1318; *see also Athletic Alternatives, Inc. v. Prince Mfg.*, 73 F.3d 1573, 1580 (Fed. Cir. 1996) (ambiguous prosecution history may be "unhelpful as an interpretive resource").

Although extrinsic evidence can also be useful, it is "'less significant than the intrinsic record in determining the legally operative meaning of claim language.'" *Phillips*, 415 F.3d at 1317 (quoting *C.R. Bard, Inc.*, 388 F.3d at 862). Technical dictionaries and treatises may help a court understand the underlying technology and the manner in which one skilled in the art might use claim terms, but technical dictionaries and treatises may provide definitions that are too broad or may not be indicative of how the term is used in the patent. *Id*. at 1318. Similarly, expert testimony may aid a court in understanding the underlying technology and determining the particular meaning of a term in the pertinent field, but an expert's conclusory, unsupported assertions as to a term's definition are entirely unhelpful to a court. *Id*. Generally, extrinsic

evidence is "less reliable than the patent and its prosecution history in determining how to read claim terms." *Id*. The Supreme Court recently explained the role of extrinsic evidence in claim construction:

> In some cases, however, the district court will need to look beyond the patent's intrinsic evidence and to consult extrinsic evidence in order to understand, for example, the background science or the meaning of a term in the relevant art during the relevant time period. *See, e.g., Seymour v. Osborne*, 11 Wall. 516, 546 (1871) (a patent may be "so interspersed with technical terms and terms of art that the testimony of scientific witnesses is indispensable to a correct understanding of its meaning"). In cases where those subsidiary facts are in dispute, courts will need to make subsidiary factual findings about that extrinsic evidence. These are the "evidentiary underpinnings" of claim construction that we discussed in *Markman*, and this subsidiary factfinding must be reviewed for clear error on appeal.

Teva Pharm. USA, Inc. v. Sandoz, Inc., 135 S. Ct. 831, 841 (2015).

B. Departing from the Ordinary Meaning of a Claim Term

There are "only two exceptions to [the] general rule" that claim terms are construed according to their plain and ordinary meaning: "1) when a patentee sets out a definition and acts as his own lexicographer, or 2) when the patentee disavows the full scope of the claim term either in the specification or during prosecution."[2] *Golden Bridge Tech., Inc. v. Apple Inc.*, 758 F.3d 1362, 1365 (Fed. Cir. 2014) (quoting *Thorner v. Sony Computer Entm't Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012)); *see also GE Lighting Solutions, LLC v. AgiLight, Inc.*, 750 F.3d 1304, 1309 (Fed. Cir. 2014) ("[T]he specification and prosecution history only compel departure from the plain meaning in two instances: lexicography and disavowal."). The standards for finding lexicography or disavowal are "exacting." *GE Lighting Solutions*, 750 F.3d at 1309..

[2] Some cases have characterized other principles of claim construction as "exceptions" to the general rule, such as the statutory requirement that a means-plus-function term is construed to cover the corresponding structure disclosed in the specification. *See, e.g., CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1367 (Fed. Cir. 2002).

To act as his own lexicographer, the patentee must "clearly set forth a definition of the disputed claim term," and "clearly express an intent to define the term." *Id.* (quoting *Thorner*, 669 F.3d at 1365); *see also Renishaw*, 158 F.3d at 1249. The patentee's lexicography must appear "with reasonable clarity, deliberateness, and precision." *Renishaw*, 158 F.3d at 1249.

To disavow or disclaim the full scope of a claim term, the patentee's statements in the specification or prosecution history must amount to a "clear and unmistakable" surrender. *Cordis Corp. v. Boston Sci. Corp.*, 561 F.3d 1319, 1329 (Fed. Cir. 2009); *see also Thorner*, 669 F.3d at 1366 ("The patentee may demonstrate intent to deviate from the ordinary and accustomed meaning of a claim term by including in the specification expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope.") "Where an applicant's statements are amenable to multiple reasonable interpretations, they cannot be deemed clear and unmistakable." *3M Innovative Props. Co. v. Tredegar Corp.*, 725 F.3d 1315, 1326 (Fed. Cir. 2013).

C. Functional Claiming and 35 U.S.C. § 112, ¶ 6 (pre-AIA) / § 112(f) (AIA) [3]

A patent claim may be expressed using functional language. *See* 35 U.S.C. § 112, ¶ 6; *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1347–49 & n.3 (Fed. Cir. 2015) (en banc in relevant portion). Section 112, Paragraph 6, provides that a structure may be claimed as a "means . . . for performing a specified function" and that an act may be claimed as a "step for performing a specified function." *Masco Corp. v. United States*, 303 F.3d 1316, 1326 (Fed. Cir. 2002).

But § 112, ¶ 6 does not apply to all functional claim language. There is a rebuttable presumption that § 112, ¶ 6 applies when the claim language includes "means" or "step for" terms, and that it does not apply in the absence of those terms. *Masco Corp.*, 303 F.3d at 1326; *Williamson*, 792 F.3d at 1348. The presumption stands or falls according to whether one of

[3] Because the application resulting in the '214 Patent was filed before September 16, 2012, the effective date of the America Invents Act ("AIA"), the Court refers to the pre-AIA version of 35 U.S.C. § 112.

ordinary skill in the art would understand the claim with the functional language, in the context of the entire specification, to denote sufficiently definite structure or acts for performing the function. *See Media Rights Techs., Inc. v. Capital One Fin. Corp.*, No. 2014-1218, 2015 U.S. App. LEXIS 15767, at *10 (Fed. Cir. Sept. 4, 2015) (§ 112, ¶ 6 does not apply when "the claim language, read in light of the specification, recites sufficiently definite structure" (quotation marks omitted) (citing *Williamson*, 792 F.3d at 1349; *Robert Bosch, LLC v. Snap-On Inc.*, 769 F.3d 1094, 1099 (Fed. Cir. 2014))); *Williamson*, 792 F.3d at 1349 (§ 112, ¶ 6 does not apply when "the words of the claim are understood by persons of ordinary skill in the art to have sufficiently definite meaning as the name for structure"); *Masco Corp.*, 303 F.3d at 1326 (§ 112, ¶ 6 does not apply when the claim includes an "act" corresponding to "how the function is performed"); *Personalized Media Commc'ns, L.L.C. v. International Trade Comm'n*, 161 F.3d 696, 704 (Fed. Cir. 1998) (§ 112, ¶ 6 does not apply when the claim includes "sufficient structure, material, or acts within the claim itself to perform entirely the recited function . . . even if the claim uses the term 'means.'" (quotation marks and citation omitted)).

When it applies, § 112, ¶ 6 limits the scope of the functional term "to only the structure, materials, or acts described in the specification as corresponding to the claimed function and equivalents thereof." *Williamson*, 792 F.3d at 1347. Construing a means-plus-function limitation involves multiple steps. "The first step . . . is a determination of the function of the means-plus-function limitation." *Medtronic, Inc. v. Advanced Cardiovascular Sys., Inc.*, 248 F.3d 1303, 1311 (Fed. Cir. 2001). "[T]he next step is to determine the corresponding structure disclosed in the specification and equivalents thereof." *Id.* A "structure disclosed in the specification is 'corresponding' structure only if the specification or prosecution history clearly links or associates that structure to the function recited in the claim." *Id.* The focus of the "corresponding

structure" inquiry is not merely whether a structure is capable of performing the recited function, but rather whether the corresponding structure is "clearly linked or associated with the [recited] function." *Id.* The corresponding structure "must include all structure that actually performs the recited function." *Default Proof Credit Card Sys. v. Home Depot U.S.A., Inc.*, 412 F.3d 1291, 1298 (Fed. Cir. 2005). However, § 112 does not permit "incorporation of structure from the written description beyond that necessary to perform the claimed function." *Micro Chem., Inc. v. Great Plains Chem. Co.*, 194 F.3d 1250, 1258 (Fed. Cir. 1999).

For § 112, ¶ 6 limitations implemented by a programmed general purpose computer or microprocessor, the corresponding structure described in the patent specification must include an algorithm for performing the function. *WMS Gaming Inc. v. International Game Tech.*, 184 F.3d 1339, 1349 (Fed. Cir. 1999). The corresponding structure is not a general purpose computer but rather the special purpose computer programmed to perform the disclosed algorithm. *Aristocrat Techs. Austl. Pty Ltd. v. International Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008).

D. Definiteness Under 35 U.S.C. § 112, ¶ 2 (pre-AIA) / § 112(b) (AIA) [4]

Patent claims must particularly point out and distinctly claim the subject matter regarded as the invention. 35 U.S.C. § 112, ¶ 2. A claim, when viewed in light of the intrinsic evidence, must "inform those skilled in the art about the scope of the invention with reasonable certainty." *Nautilus Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2129 (2014). If it does not, the claim fails § 112, ¶ 2 and is therefore invalid as indefinite. *Id.* at 2124. Whether a claim is indefinite is determined from the perspective of one of ordinary skill in the art as of the time the application for the patent was filed. *Id.* at 2130. As it is a challenge to the validity of a patent, the failure of any claim in suit to comply with § 112 must be shown by clear and convincing evidence. *Id.* at

[4] Because the application resulting in the '214 Patent was filed before September 16, 2012, the effective date of the America Invents Act ("AIA"), the Court refers to the pre-AIA version of 35 U.S.C. § 112.

2130 n.10. "[I]ndefiniteness is a question of law and in effect part of claim construction." *ePlus, Inc. v. Lawson Software, Inc.*, 700 F.3d 509, 517 (Fed. Cir. 2012).

In the context of a claim governed by 35 U.S.C. § 112, ¶ 6, the claim is invalid as indefinite if the claim fails to disclose adequate corresponding structure to perform the claimed functions. *Williamson*, 792 F.3d at 1351–52. The disclosure is inadequate when one of ordinary skill in the art "would be unable to recognize the structure in the specification and associate it with the corresponding function in the claim." *Id*. at 1352.

III. CONSTRUCTION OF AGREED TERMS

The parties have agreed to the following constructions set forth in their P.R. 4-5(d) Joint Claim Construction Chart Pursuant (Dkt. No. 169):

Term[5]	Agreed Construction
"at least one property of the external cursor including position of the external cursor" • Claim 26	"at least one property of the external cursor and a position of the external cursor" • subject to the constructions of "at least one property" and "external cursor"
"processing the image" • Claims 2, 17, 19, 24	plain and ordinary meaning
"processing an image" • Claim 26	plain and ordinary meaning
"fiducials" • Claim 20	"reference points"
"capturing an image . . ." • Claims 2, 17, 19, 24	plain and ordinary meaning

[5] For all term charts in this order, the claims in which the term is found are listed with the term but: (1) only the highest level claim in each dependency chain is listed, and (2) only asserted claims identified in the parties' P.R.4-5(d) Joint Claim Construction Chart (Dkt. No. 169) are listed.

IV. CONSTRUCTION OF DISPUTED TERMS

The parties' positions and the Court's analysis as to the disputed terms are presented below. Plaintiff submits that the person having ordinary skill in the art, from whose perspective the claims are interpreted, is:

> a person with a bachelor's degree in electrical engineering, computer engineering, or computer science, or the equivalent, and two or more years of experience designing computer systems.

Dkt. No. 143 at 9 (citing Declaration of Dr. Sam Russ In Support of Plaintiff SyncPoint's Claim Construction Brief ("Russ Decl.") ¶ 17 (Plaintiff's Ex. 5, Dkt. No. 144 at 5)). Defendants do not oppose Plaintiff's submission. Dkt. No. 156 at 8. Accordingly, the Court adopts Plaintiff's proposal.

A. The "Cursor" Terms

Disputed Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction
"internal cursor" • Claims 1, 17, 24, 26	"a representation of position that is movable on a display"	"visual cue to a user on the screen generated by the computer"
"cursor generated by the computer" • Claims 19, 25	"internal cursor"	"visual cue to a user on the screen generated by the computer"
"external cursor" • Claims 1, 17, 25, 26	"a representation of position that is movable on an imaging array"	"a visual cue to a user on the screen generated by some device other than the computer"
"optical cursor" • Claims 19, 24		
"optical cursor generated by a handheld pointer" • Claims 19, 24	"external cursor generated by a hand-held pointer"	"a visual cue to a user on the screen generated by an optical handheld pointer"

Because the parties' arguments and proposed constructions with respect to these terms are related, the Court addresses the terms together.

The Parties' Positions

Plaintiff asserts that the term "internal cursor" and the word "cursor" have the same common and widely understood meaning. The applicant added the word "internal" to the word "cursor," the Plaintiff submits, to distinguish the "internal cursor" from the "external cursor" and to explain that the "internal cursor" is a cursor generated by the computer. Dkt. No. 143 at 14–15. Plaintiff further submits that the terms "internal cursor" and "cursor generated by the computer" are synonymous in the '214 Patent. *Id*. at 13. Plaintiff adds that the significant characteristics of a cursor, generally and with respect to the "internal cursor," are that (1) cursors are representative of a position and (2) cursors are movable. *Id*. Plaintiff submits that a cursor may be—but need not be—visible. *Id*. at 14 (citing Russ Decl. ¶ 25). Plaintiff argues that Defendants' proposed limitation which adds the limitation "to a user" is unclear and unsupported by the intrinsic or extrinsic evidence. *Id*. at 15.

With respect to "external cursor," Plaintiff submits that, like an "internal cursor," an "external cursor" represents a position and is movable. *Id*. at 16. Plaintiff further submits that the "external cursor" is distinct from the "internal cursor" in that (1) the "external cursor" represents a movable position on an imaging array rather than on a display and (2) the "external cursor" is generated externally to the computer rather than internally to the computer. *Id*. Plaintiff contends that an "optical" cursor is an "external cursor" and that the term "optical" includes visible and invisible light such that the "external cursor" may be—but need not be—visible. *Id*. at 17–18 (citing Russ Decl. ¶ 23). Furthermore, Plaintiff asserts that an "external cursor" is not necessarily "on the screen" and that the '214 Patent discloses an "external cursor" that denotes a position

that is relative to a screen but is not necessarily on the screen. *Id*. at 18–19. Plaintiff argues that Defendants' proposed "to a user" limitation is unclear and unsupported by the intrinsic or extrinsic evidence. *Id*. at 19.

With respect to "optical cursor generated by a hand-held pointer," Plaintiff submits that "for relevant purposes, an 'optical cursor' is an 'external cursor.'" *Id*. at 21–22. Thus, Plaintiff argues, the dispute over the meaning of "optical cursor generated by a hand-held pointer" can be resolved with the dispute over the meaning of "external cursor." *Id*. at 22.

In addition to the claims themselves, Plaintiff cites the following intrinsic and extrinsic evidence to support its position. **Intrinsic evidence**: '214 Patent [54] Title, [57] Abstract, col.1 l.7, col.1 l.9, col.1 ll.41-42, col.1 ll.56–64, col.2 ll.3–7, col.2 l.9, col.2 ll.13–27, col.2 ll.39–42, col.2 l.53, col.2 l.61, col.2 l.67 – col.3 l.1, col.3 ll.22–23, col.3 l.33, col.3 ll.41–45, col.3 ll.47–52, col.4 l.2, col.4 ll.27 – col.7 l.27, col.8 ll.12–20, col.8 l.26, col.8 ll.32–33, col.8 ll.40–41, col.8 l.45, col.8 l.50, col.8 l.61, col.8 l.63, col.8 l.67, col.9 ll.16–24, fig.1, fig.2; '214 Patent File Wrapper November 9, 2000 Amendment (Plaintiff's Ex. 2, Dkt. No. 146 at 55–62), May 4, 2001 Notice of Allowability (Plaintiff's Ex. 2, Dkt. No. 146 at 71–73, 76). **Extrinsic evidence**: Martin Weik, *Computer Science and Communications Dictionary Vol. II* (2000) ("near-visible spectrum," "optical," and "optics") (Plaintiff's Ex. 3, Dkt. No. 149 at 1–5); *Merriam-Webster's Collegiate Dictionary Deluxe Edition* (1998) ("cursor") (Plaintiff's Ex. 3, Dkt. No. 149 at 13–19); Brad Hansen, *The Dictionary of Multimedia Terms & Acronyms* (1999) ("cursor") (Plaintiff's Ex. 4, Dkt. No. 148 at 7–10); *IBM Dictionary of Computing* (10th ed. 1994) ("cursor") (Plaintiff's Ex. 4, Dkt. No. 148 at 11–16); *Webster's Ninth New Collegiate Dictionary* (1986) ("optical" and "optics") (Plaintiff's Ex. 4, Dkt. No. 148 at 38–47); Russ Decl. (Plaintiff's Ex. 5, Dkt. No. 144).

Defendants respond that "cursor" is used in the '214 Patent according to the term's ordinary meaning. Dkt. No. 156 at 9. And, Defendants contend, the ordinary meaning of the term, set forth in the patent and in the extrinsic evidence, is that a "cursor" is part of a user interface and is a visual cue that "indicate[s] to a user where the user is pointing." *Id*. at 9–10, 14 (citing Rebuttal Expert Declaration of Garry E. Kitchen re: Claim Construction of U.S. Patent No. 6,275,214 ¶¶ 32, 34 ("Kitchen Decl.") (Dkt. No. 156-11 at 10)).

With respect to "internal cursor," Defendants respond that "internal cursor" and "cursor generated by the computer" are used synonymously in the '214 Patent to denote a cursor generated by the computer. *Id*. at 19. Defendants further respond that "internal" and "external" cursors are different in that they are generated by different devices. *Id*. at 19–20. Defendants argue that Plaintiff's proposed construction fails to capture this difference. In fact, Defendants assert that Plaintiff's proposed construction blurs any distinction between "internal cursor" and "external cursor" in that the "external cursor" of the preferred embodiment would satisfy Plaintiff's construction of "internal cursor." *Id*. at 20.

With respect to "external cursor," Defendants respond that the term is explicitly used in the '214 Patent to denote a cursor (as that term is ordinarily used) that is generated externally to the computer (i.e., not generated by the computer), rather than internally to the computer (i.e., generated by the computer). *Id* at 11 (citing '214 Patent col.3 ll.22–28). That is, the term "external cursor" refers to a cursor that is generated by some device other than the computer. *Id*. Defendants further respond that "cursor" was not specially defined in the patent to include anything invisible to the user, and therefore, an "external cursor" must be visible to the user (i.e., it must be a visual cue). *Id*. at 12–14. Defendants further respond that the "external cursor" must be visible on the screen, as per the "explicit requirements in the claims" and as is shown in "each

and every description of the external cursor in the specification." *Id*. at 14. Defendants argue that even if extrinsic evidence suggests that "optical" includes both visible and invisible light, such evidence should be disregarded because it contradicts the '214 Patent's specification. *Id*. at 13. Furthermore, Defendants contend that Plaintiff's proposed construction improperly defines "external cursor" with respect to what detects the cursor rather than what generates it. *Id*. at 15–17. Defendants assert there is no mention in the '214 Patent of the "imaging array" limitation that Plaintiff proposes. *Id*. at 15. Defendants argue that requiring the "external cursor" to exist only on an imaging array would exclude the preferred embodiment in which the "external cursor" is a light dot on the screen. *Id*. at 16–17.

With respect to "optical cursor generated by a hand-held pointer," Defendants respond that as with "internal cursor" and "external cursor," the "optical cursor generated by a hand-held pointer" is a cursor defined by the device that generates it. *Id*. at 17–18. Defendants contend that the device that generates the cursor is an optical hand-held pointer. *Id*. at 18. Defendants argue that Plaintiff's proposed construction improperly requires the cursor to be on an imaging array. Defendants claim that this conflicts with Claim 19's limitation of "projecting an optical cursor generated by a hand-held pointer on the remotely located screen." *Id*.

In addition to the claims themselves, Defendants cite the following intrinsic and extrinsic evidence to support their position. **Intrinsic evidence**: '214 Patent col.1 ll.55–60, col.2 ll.32–35, col.3 ll.22–28, col.4 ll.27–28, fig.1, fig.2. **Extrinsic evidence**: September 27, 2015 Deposition of Samuel H. Russ, Ph.D. ("Russ Dep.") (Defendants' Ex. B, Dkt. No. 156-3); 2002 Prototype Video (referenced in SyncPoint's Response to Interrogatory No. 1 (Defendants' Ex. C, Dkt. No. 156-4)); Pages from of an archived copy of http://brilliantpoints.com, available at https:// web.archive.org/ web/20100412134215/http://brilliantpoints.com (Defendants' Ex. D, Dkt. No.

156-5); *Merriam-Webster's Collegiate Dictionary Deluxe Edition* (1998) ("cursor") (Defendants' Ex. E, Dkt. No. 156-6); *IBM Dictionary of Computing* (10th ed. 1994) ("cursor") (Defendants' Ex. F, Dkt. No. 156-7); *Prentice Hall's Illustrated Dictionary of Computing* (3d ed. 1998) ("cursor") (Defendants' Ex. G, Dkt. No. 156-8); Brad Hansen, *The Dictionary of Multimedia Terms & Acronyms* (1999) ("cursor") (Defendants' Ex. H, Dkt. No. 156-9); Kitchen Decl. (Dkt. No. 156-11); Patent Owner's Preliminary Response to Petition for Inter Partes Review, IPR2015-01347 (excerpt) (Defendants' Ex. I, Dkt. No. 156-10).

Plaintiff replies that the "external cursor" is not necessarily visible—that given the meaning of "optical," the '214 Patent discloses both invisible cursors and visible cursors. Dkt. No. 164 at 3–4 (contrasting "optical pointer" and "laser pointer"). Plaintiff cites Nintendo design documents to support the contention that "optical pointer" may refer to devices that produce infrared light, and, therefore, an optical pointer may generate an invisible cursor. *Id*. at 4. Plaintiff further replies that the "external cursor" is not necessarily on a screen—that the cursor is detected when the light is captured at the imaging array, whether the cursor light arrives at the imaging array from the pointer directly or after first being reflected off an object. *Id*. at 6–7.

Plaintiff cites intrinsic and extrinsic evidence to support its position: **Intrinsic evidence**: '214 Patent col.8 ll.11–14. **Extrinsic evidence**: October 6, 2015 Deposition of Garry Kitchen ("Kitchen Dep.") (Plaintiff's Ex. E, Dkt. No. 165-2 & Dkt. No. 176-1); Nintendo, Request for OPD (Optical Pointing Device) (Plaintiff's Ex. A, Dkt. No. 165-1); Russ Dep. (Plaintiff's Ex. C, Dkt. No. 164-5); Supplemental Declaration of Dr. Sam Russ In Support of Plaintiff SyncPoint's Claim Construction Brief ("Russ Supp. Decl.") (Dkt. No. 164-1).

Analysis

The parties agree that an "internal cursor" is a cursor generated by the computer and that an "external cursor" is a cursor generated by some device other than the computer. The parties further agree that a cursor is used to selectively mark a position on a display or screen. The parties dispute two issues with respect to the cursor terms: (1) whether the "internal cursor" and "external cursor" must be visible to the user and (2) whether the "external cursor" exists on the screen or on the imaging array of an imaging device. The Court finds that the "internal cursor" and the "external cursor" each provide some visual feedback to the user to indicate a position on a display for the computer's visual output. The Court does not find that the "external cursor" must be on a screen.

While the parties have not requested construction of the term "cursor" itself, their dispute fundamentally revolves around the ordinary meaning of "cursor." Defendants contend that a cursor is a "visual cue" that is part of a computer user interface and that the cursor must be visible to the user. Plaintiff contends that a cursor need not be visible to the user. The Court finds that a cursor is a visible mark that indicates to a user a position on a display for a computer.

The '214 Patent uses the term "cursor" as a mark indicating a position on a display for a computer's visual output. *See, e.g.*, '214 Patent col.1 ll.56–60 ("Another object of the present invention is to provide a system and method for remotely controlling a computer based on characteristics of an optical pointer used to superimpose a cursor or visual cue onto a projected image of a computer screen."), col.1 ll.61–64 ("A further object of the present invention is to provide a system and method for synchronizing position and/or movement of a cursor on a computer screen with position and/or movement of an optical pointer."). The "cursor" may, for example, mark the position where information is received from the user to initiate an operation

on the computer. *See, e.g., id.* at col.1 ll.52–55 ("it is an object of the present invention to provide a system and method for remotely controlling a computer in a similar manner as performed by a conventional pointing device"), col.3 ll.22–62 (describing placing an external cursor at a position on the visual output of a computer, moving an internal cursor to that same position, and generating "position-dependent commands which are used to remotely control computer 10. Such position or context-dependent commands may emulate a 'left-click' or 'right-click' command generated by a traditional computer pointing device, such as a mouse, track ball, touch pad, or the like."). Furthermore, the '214 Patent indicates that a user may move the cursor to various positions on the display. A cursor that indicates a position on a display and permits movement by the user must be visible to the user.

The Court rejects Plaintiff's proposed "invisible" cursor. A cursor that the user cannot see conflicts with the meaning of the term "cursor" as used in the patent and conflicts with the meaning of the term as used in the relevant extrinsic evidence. *See, e.g., Merriam-Webster's Collegiate Dictionary Deluxe Edition* 445 (1998) (Dkt. No. 149 at 16–17) (defining "cursor" as "a movable item used to mark a position; as . . . a visual cue (as a flashing rectangle) on a video display that indicates position (as for data entry)"); Brad Hansen, *The Dictionary of Multimedia Terms & Acronyms* 71 (1999) (Dkt. No. 148 at 10) (defining "cursor" as "[a]n image, arrow, or I-beam on a computer screen that shows where information may be entered or where a mouse or light pen are located on the screen. It may be represented by any icon"); *IBM Dictionary of Computing* 159 (10th ed. 1994) (Dkt. No. 148 at 13) (defining "cursor" as "[a] movable, visible mark used to indicate a position of interest on a display surface" and "[i]n SAA Common User Access architecture, a visual cue that shows a user where keyboard input will appear on the screen"); *Prentice Hall's Illustrated Dictionary of Computing* 148 (3d ed. 1998) (Dkt. No. 148 at

20) (defining "cursor" as a "marker on the screen of a computer that shows where the information will next appear when information is entered or retrieved. [ISO A movable, visible mark used to indicate the position at which the next operation will occur on a display surface.]" (brackets in original)).

Plaintiff has not identified sufficient reason to deviate from the plain meaning of "cursor." A patent's "specification and prosecution history only compel departure from the plain meaning [of a claim term] in two instances: lexicography and disavowal. . . . [and] the standards for finding lexicography and disavowal are exacting." *See GE Lighting Solutions, LLC v. AgiLight, Inc.*, 750 F.3d 1304, 1308–09 (Fed. Cir. 2014) (citing *Thorner v. Sony Computer Entm't Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012)). "To act as its own lexicographer, a patentee must 'clearly set forth a definition of the disputed claim term,' and 'clearly express an intent to define the term.'" *Id*. (quoting *Thorner*, 669 F.3d at 1365). "Similarly, disavowal requires that 'the specification or prosecution history make clear that the invention does not include a particular feature.'" *Id*. at 1309 (quotation modification marks omitted) (quoting *SciMed Life Sys. Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1341 (Fed. Cir. 2001)). There is no lexicography or disavowal that supports Plaintiff's special definition of "cursor" as an invisible indicator of position. Furthermore, as set forth below, Plaintiff's argument that the term "optical" dictates that a "cursor" of the '214 Patent may be "invisible" is also unavailing.

Internal Cursor / Cursor Generated by the Computer. The parties agree that an "internal cursor" is a cursor generated by the computer. Thus, the "internal cursor" is a visible mark that is generated by the computer and that indicates a position on the display for the visual output from the computer.

The Court, however, rejects Defendants' proposed "on the screen" limitation. The limitation does not clarify the scope of the claim, may inject ambiguity into the claims, and may improperly limit the scope of the claim. For example, Claims 17, 25, and 26 do not recite an "on the screen" limitation but do recite the plain meaning of cursor which is a visible mark that indicates a position on the display for the visual output from the computer.

External Cursor. "External cursor" is defined in the '214 Patent:

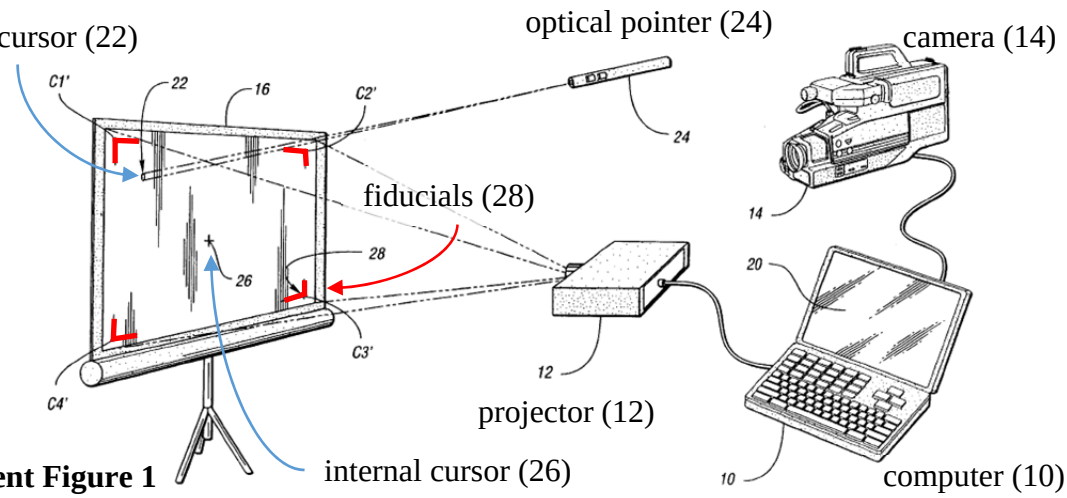
> As used in this application, ***an external cursor is one which is generated externally relative to computer 10, i.e. generated by some other device which could include another computer, projector, or the like***. In one embodiment, external cursor 22 is generated by a hand-held optical pointer 24 which has the capability of varying at least one property of external cursor 22. For example, optical pointer 24 may vary the color, shape, size, intensity, illumination pattern, motion, and/or position of external cursor 22 to generate one or more commands to remotely control computer 10 according to the present invention. In one preferred embodiment, optical pointer 24 is a laser pointer which generates an external cursor in one of two user-selectable colors. In this embodiment, the external cursor has a significantly higher intensity than the output of the computer and is therefore more easily detected.

'214 Patent col.3 ll.22–40 (emphasis added). An "external cursor" is a cursor that is generated by a device other than the computer. Thus, the "external cursor" is a visible mark that is both generated by a device other than the computer and that indicates a position on the display for the visual output from the computer.

The Court rejects Plaintiff's proposed "imaging array" limitation. The '214 Patent does not exclude an "external cursor" that is generated or detected with an imaging array. However, the '214 Patent also does not require the "external cursor" to be generated or detected in this manner. For example, the embodiment described with reference to Figure 1 (reproduced here and annotated by the Court) includes "an external cursor, indicated generally by reference numeral 22, [that] is superimposed on image 16 which is output from computer 10." '214 Patent col.3 ll.21–23. The '214 Patent describes the "external cursor" as being generated by an "optical

pointer 24 [such as] a laser pointer which generates an external cursor in one of two user-selectable colors." *Id.* at col.3 ll.28–37. The "external cursor" of Figure 1 is detected through an imaging array in the camera. *Id.* at col.3 ll.41–61, col.8 ll.11–14. But in this embodiment, the "external cursor" operates independently from the camera's imaging array and may not be "movable on an imaging array." Thus, Plaintiff's "imaging array" limitation may exclude the exemplary embodiment in Figure 1. A "construction that excludes a preferred embodiment is rarely, if ever, correct." *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 865 (Fed. Cir. 2004).

Furthermore, the Court does not find Plaintiff's argument about the meaning of "optical cursor" persuasive. Plaintiff claims that an "external cursor" may be invisible to the user because



'214 Patent Figure 1

an "external cursor" may be an "optical cursor" and the term "optical" encompasses both visible and invisible light. This ignores the plain meaning of "cursor" which is a visual indicator of position. The Court also rejects Defendants' proposed "on the screen" limitations for the reasons set forth in the Court's discussion of "internal cursor" above.

Optical Cursor Generated by a Handheld Pointer / Optical Cursor. These terms are found in Claims 19 and 24. In both claims, the term "optical cursor generated by a handheld

pointer" serves as the antecedent basis for the later term "the optical cursor." These two terms are therefore equivalent.

An "optical cursor generated by a handheld pointer" is a subcategory of "external cursor," because as the claims state, it is a cursor that is generated by a handheld optical means. *See* '214 Patent col.3 ll.28–29 ("In one embodiment, external cursor 22 is generated by a hand-held optical pointer 24 which has the capability of varying at least one property of external cursor 22."), col.8 ll.32–35 ("Preferably, the external cursor is an optical cursor generated by a hand-held pointer and includes at least one user selectable (changeable) property."). This "optical cursor" differs from an "external cursor" that is generated by other means such as "another computer, projector, or the like." *Id*. at col.3 ll.22–28.

The plain meaning of "optical" encompasses both visible and near-visible light. *See, e.g.*, Martin Weik, *Computer Science and Communications Dictionary Vol. II* 1158 (2000)) (Dkt. No. 149 at 4) (defining "optical" as "[p]ertaining to systems, devices, or components that generate, process, and detect lightwaves or light energy" and "[p]ertaining to the . . . lightwave region of the electromagnetic spectrum, i.e., the region in which the techniques and components used in the visible spectrum also apply to the region extending . . . into the ultraviolet and infrared regions"); Kitchen Dep. 148:3–21 (Dkt. No. 176-1 at 32) (testifying that "[o]ptics is not limited to visual light"); Russ Decl. ¶¶ 22–23 (Dkt. No. 144 at 6) (declaring that "'optics' deals with both visible and near-visible light," and "'[o]ptical' refers, therefore, to both visible and invisible light (including infrared light)"). However, a cursor must be visible to a user. Because an "optical cursor" is an "external cursor" and all cursors must be visible to the user, an "optical cursor" cannot be invisible regardless of the type of light (e.g., infrared or ultraviolet light) used to generate the "optical cursor."

Accordingly, the Court construes the "Cursor" Terms as follows:

- "internal cursor" / "cursor generated by the computer" means "movable visible mark that is generated by the computer and that indicates a position on the display for the output of the computer";
- "external cursor" means "movable visible mark that is generated by some device other than the computer and that indicates a position on the display for the output of the computer"; and
- "optical cursor generated by a handheld pointer" / "optical cursor" means "movable visible mark that is generated by a handheld optical pointer and that indicates a position on the display for the output of the computer."

B. The "Detecting Position" Terms

Disputed Term	Plaintiff's Proposed Construction	Defendant's Proposed Construction
"detecting . . . position of the external cursor relative to the output from the computer" • Claim 1	plain and ordinary meaning	"detecting on the associated screen the presence of the external cursor and output from the computer, and the position of the external cursor in relation to the output"
"detect position of the optical cursor" • Claims 19, 24		
"detect . . . position of the external cursor relative to the output" • Claim 26		

Because the parties' arguments and proposed constructions with respect to these terms are related, the Court addresses the terms together.

The Parties' Positions

Plaintiff submits that once the Court construes "external cursor," the meaning of the Detecting Position terms should become readily apparent. Dkt. No. 143 at 22. Plaintiff argues that Defendants' construction improperly includes two limitations, namely, that the "external cursor" be "on the associated screen" and that "detecting" includes detecting the "output from the computer." *Id*. at 22–23.

Defendants respond that the claims require that the detected position of the external cursor be in relation to the output of the computer, and thus the position of the output of the computer must also be detected. Dkt. No. 156 at 24. Defendants further respond that all the exemplary embodiments in the '214 Patent detect both the position of the output and the position of the external cursor. Id. at 24–25.

In addition to the claims themselves, Defendants cite the following intrinsic and extrinsic evidence to support their position. **Intrinsic evidence**: '214 Patent [57] Abstract, col.1 ll.55–59, col.1 ll.61–64, col.2 ll.43–45, col.3 ll.22–24, col.3 ll.41–48, col.3 l.63 – col.4 l.8, col.4 ll.42–44, col.7 ll.21–27, col.7 ll.60–64, col.8 ll.11–12, fig.1, fig.2, fig.3. **Extrinsic evidence**: Russ Dep. (Defendants' Ex. B, Dkt. No. 156-3).

Plaintiff replies that detecting the position of the external cursor in relation to the output requires knowledge of the position of the output, but this knowledge does not necessarily require detecting the computer output. Dkt. No. 164 at 9. Plaintiff argues that the preferred embodiment in the '214 Patent does not detect the output; rather, it detects the fiducials and uses the information about the fiducials to determine the position of the external cursor. *Id*. Plaintiff further argues that there is a distinction between "capturing" and "detecting," and that the system may capture an image yet detect only the fiducials and external cursor in the image to determine

the position of the external cursor relative to the output. *Id*. at 9–10. Finally, Plaintiff replies that the external cursor is not necessarily detected "on the associated screen," but need only be detected "relative to the output." *Id*. at 10.

In addition to the claims themselves, Plaintiff cites further intrinsic and extrinsic evidence to support its position: **Intrinsic evidence**: '214 Patent [57] Abstract, col.1 ll.55–59, col.1 ll.61–64, col.2 ll.16–17, col.2 ll.43–45, col.3 ll.22–24, col.3 ll.41–48, col.4 ll.42–44, col.8 ll.11–12, col.8 ll.26–27, fig.1. **Extrinsic evidence**: Russ Dep. (Plaintiff's Ex. C, Dkt. No. 164-5).

Analysis

The parties raise two disputes on the Detecting Position terms: (1) whether the output must also be detected to detect the position of the "external cursor" relative to the output, and (2) whether the "external cursor" / "optical cursor" must be on the screen. For the reasons stated in the Court's discussion of the Cursor terms above, the Court rejects Defendants' proposed "screen" limitation. As explained below, the Court also rejects Defendants' proposed "detecting . . .the . . . output of the computer" limitation.

Defendants' base their proposed construction on the concept that a computer's output must be detected in order to determine the "external cursor's" position relative to the output. But the '214 Patent's disclosures contradict this. The patent describes a position-detecting scheme that detects the position of the "external cursor" with reference to pre-known fiducial positions.

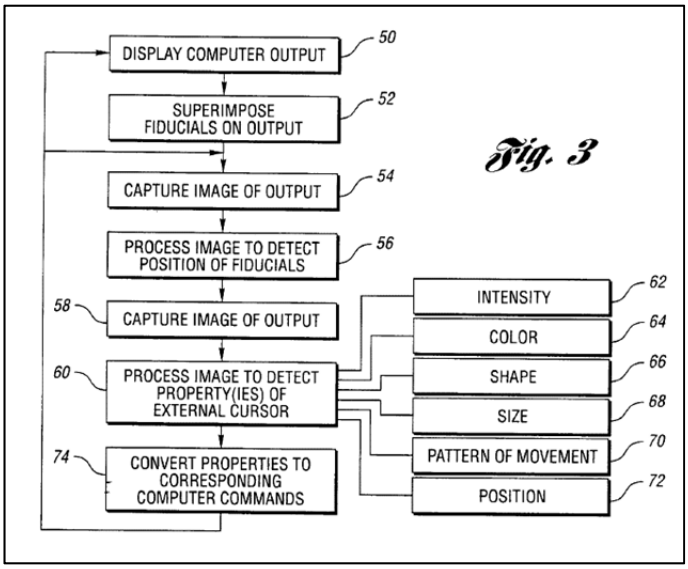
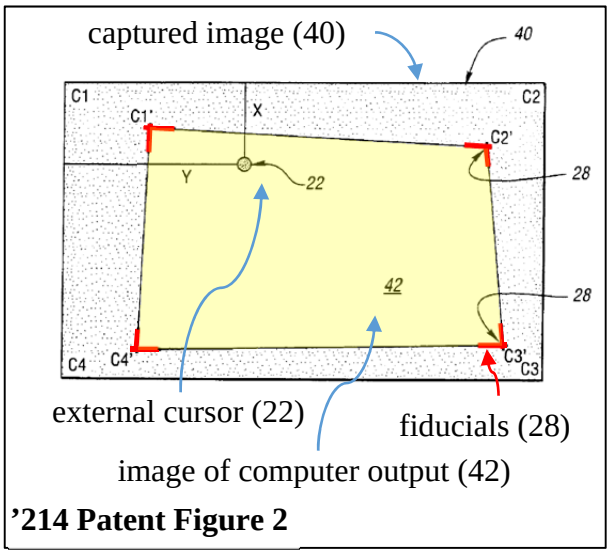


Fig. 3

Figure 3 of the '214 Patent, for

example, describes a system in which fiducials are superimposed on the computer output (52), captured in an image of the output (54), and used to calibrate the system (56). '214 Patent col.7 l.65–col.8 l.27. The calibration routine includes determining the positions of the fiducials in the image (56). *Id*. Once the calibration routine has been completed and the position of the fiducials is known, the system repeatedly captures and processes images (58, 60, 74). *Id*. at col.8 ll.28–67. The system uses the fiducial positions known from the calibration routine (56) to determine the position of the external cursor (72) relative to the computer output. *Id*. at col.8 ll.24–27, ll.40–43. But the system does not again process the fiducials unless another calibration routine is initiated. *Id*. at col.8 ll.21–30. That is, the system does not detect the output to determine the position of the external cursor relative to the output, and the system does not detect the fiducials each time it detects the position of the external cursor.

The use of fiducial-position information known before the capture of the external cursor to detect the position of the cursor relative to the output is also explained with reference to Figure 2, reproduced here and annotated by the Court. *Id*. at col.4 l.27 – col.7 l.27. An image (40) of the display for the computer output is captured while fiducials (28) are superimposed on the computer output (the image of which is denoted 42, in yellow) at known positions (C1′, C2′, C3′, C4′) relative to the output. *Id*. at col.4 ll.27–54. The system detects the positions of the fiducials (28) with respect to the captured image (40). *Id*. at col.4 ll.54–65. Then the system determines a set of equations that are used to translate a position relative to the captured image



'214 Patent Figure 2

(40) to a position relative to the computer output (42). *Id*. at col.5 l.1–col.7 l.4 (defining the position with respect to the image using (X,Y) coordinates and the position with respect to the output using (T,U) coordinates). Thus, "once Cl′, C2′, C3′, and C4′ are known, and the (X,Y) coordinates of external cursor 22 are determined, a [] computation yields values for (T,U) which represent the 'mouse coordinates' for internal cursor 26 of the computer output." *Id*. at col.7 ll.5–9.

As shown above, the patent contemplates detecting the position of the "external cursor" relative to the output by (1) detecting the position of the "external cursor" relative to the captured image, (X,Y) and (2) translating that (X,Y) position to a position relative to the output, (T,U). The translation of the cursor's (X,Y) position to its (T,U) position is accomplished through application of equations derived from the calibration routine and the known positions of the fiducials with respect to the output. There is no need to detect the output to detect the position of the cursor relative to the output.

Defendants' proposed construction would exclude embodiments in which the position of the external cursor relative to the output is detected without detecting the position of the output. A "construction that excludes a preferred embodiment is rarely, if ever, correct." *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 865 (Fed. Cir. 2004).

Accordingly, the Court rejects Defendants' proposed "associated screen" and "detecting . . . the . . . output" limitations and determines that each of the "Detecting Position" Terms has its plain and ordinary meaning.

C. The "At Least One Property" Terms

Disputed Term	Plaintiff's Proposed Construction	Defendant's Proposed Construction

Disputed Term	Plaintiff's Proposed Construction	Defendant's Proposed Construction
"at least one property" • Claims 1, 17, 19, 24, 26	"an optically detected characteristic that is not the position"	"a property not based on position"
"at least one . . . property" • Claims 1, 19, 25		
"at least one . . . properties" • Claim 25		

Because the parties' arguments and proposed constructions with respect to these terms are related, the Court addresses the terms together.

The Parties' Positions

Plaintiff submits that the "property" of these terms is a property of the cursor that, while not the cursor's position, may be based on the cursor's position. Dkt. No. 143 at 10–11. Plaintiff argues that there is no intrinsic evidence to support Defendants' proposed exclusion of properties based on the cursor's position. *Id*. at 11. Plaintiff also argues that one of the properties disclosed and claimed in the patent, a cursor's "pattern of movement," is necessarily based on the cursor's position. *Id*.

In addition to the claims themselves, Plaintiff cites the following **intrinsic evidence**: '214 Patent [54] Title, [57] Abstract, col.2 l.23, col.3 ll.31–33, col.7 ll.23–24, col.8 ll.36–40, col.9 ll.10–12, fig.3; '214 Patent File Wrapper November 9, 2000 Amendment (Plaintiff's Ex. 2, Dkt. No. 146 at 55–62).

Defendants respond that a "pattern of movement" may or may not be based on the cursor's position. Defendants assert that their proposed construction properly excludes any "property" that is position-based and properly includes any "property" that is not position-based. Dkt. No. 156 at 21–23. Defendants contend a person of skill in the art in 1999 would know of

cursor patterns of movement such as the Windows rotating hourglass or the Apple spinning wheel that are not based on the cursor's position. *Id*. (citing Kitchen Decl. ¶ 35 (Dkt. No. 156-11 at 11)). Defendants also respond that a position-based pattern of movement, such as a path through which the cursor travels, is not a property of the cursor because the path is not intrinsic to the cursor itself. *Id*. at 22. Defendants contend that position-based properties were disclaimed during prosecution leading to issuance of the '214 Patent. *Id*. at 23.

In addition to the claims themselves, Defendants cite the following intrinsic and extrinsic evidence to support their position. **Intrinsic evidence**: '214 Patent File Wrapper (excerpts) (Defendants Ex. A, Dkt No. 156–2). **Extrinsic evidence**: Russ Dep. (Defendants' Ex. B, Dkt. No. 156-3); Kitchen Decl. (Dkt. No. 156-11).

Plaintiff replies that there is no evidence to support Defendants' proposed "intrinsic property" limitation. Dkt. No. 164 at 7–8. Plaintiff further replies that the '214 Patent uses "pattern of movement" to include a pattern of changing positions, and that the term, and therefore the pattern of movement "property," is not restricted to patterns that are not position-based. *Id.* at 8. Plaintiff argues that the applicant's statements in the prosecution history are not a disclaimer of position-based properties, but of position itself. *Id.* ("The Applicant limited the 'at least one . . . property' limitation to properties *that are not position*.").

Plaintiff cites further **extrinsic evidence** to support its position: Russ Supp. Decl. (Dkt. No. 164-1).

Analysis

The dispute here centers on whether the property of the "external cursor" may be based on the position. The parties agree that the '214 Patent describes a cursor's "pattern of movement" as a "property." Plaintiff contends that this "pattern of movement" includes changes in position

of the cursor, that is, it includes position-based patterns. Defendants contend that this "pattern of movement" is limited to movement of the cursor other than change of position (such as changes in shape or orientation of the cursor)—that the '214 Patent's "pattern of movement" property excludes position-based patterns because position-based characteristics are not intrinsic properties of the cursor. The Court agrees with Plaintiff that "at least one property" does not include the position itself, but does include other properties that are based on position.

Defendants have not established that "pattern of movement," and therefore "property," does not include position-based movement. "The patentee is free to choose a broad term and expect to obtain the full scope of its plain and ordinary meaning unless the patentee explicitly redefines the term or disavows its full scope." *Thorner v. Sony Computer Entm't Am. LLC*, 669 F.3d 1362, 1367 (Fed. Cir. 2012); *see also GE Lighting Solutions, LLC v. AgiLight, Inc.*, 750 F.3d 1304, 1308–09 (Fed. Cir. 2014) ("the specification and prosecution history only compel departure from the plain meaning in two instances: lexicography and disavowal" (citing *Thorner*, 669 F.3d at 1365)). And "the standards for finding lexicography and disavowal are exacting." *GE Lighting*, 750 F.3d at 1309. The parties cannot seriously dispute that the term "patterns of movement," broadly interpreted, includes position-based movement. Defendants have not identified anything in the intrinsic evidence that establishes either lexicography or disavowal that justifies narrowing "patterns of movement"—and thus "property"—as they suggest.

For example, with respect to the prosecution history, Defendants' have not shown that the applicant disclaimed all position-based movements. The evidence of disclaimer that Defendants point to in the prosecution history is better interpreted as disclaimers of commands based solely on the position of the cursor. The claims were amended to reflect this. For example, in distinguishing a first reference, *Hauck*, the applicant stated:

> In contrast, ***Applicant's invention*** as disclosed and claimed uses an external cursor having a plurality of properties (such as shape, ***movement pattern***, color, etc.) to remotely control the computer, and ***does not rely solely on cursor position*** (i.e. presence or absence of a cursor within a button) to control the computer. Applicant respectfully submits that the detection of the various user selectable properties of the external cursor is patentably ***distinct from detecting the mere presence of a cursor at a particular position on the screen***.

'214 Patent File Wrapper November 9, 2000 Amendment 6 (Dkt. No. 146 at 60) (emphasis added). The applicant similarly argued to distinguish a second reference, *Arita*:

> Similar to Hauck, Arita requires display of a particular structure or function on the screen which is then selected by the presence or absence of a particular cursor. To track multiple cursors, each associated with a particular operator or user, Arita teaches the use of a cursor property or characteristic, such as shape. However, unlike Applicant's invention, the cursor property is used to associate the cursor with an operator and the operator's display terminal. There is no disclosure or suggestion in Arita to utilize a pointer with multiple user selectable properties to control the computer. To the extent any control to the computer is provided, the control is based on the position of the cursor and not the characteristic or property of the cursor.
>
> Applicant's invention as disclosed and claimed includes a number of features which are patentably distinguishable over Arita. In particular, ***Applicant's invention as defined in the independent claims controls the computer based on at least one user selectable property of the external cursor in addition to the position of the external cursor***.

Id. at 7 (Dkt. No. 146 at 61) (emphasis added). Thus, the applicant characterized his invention as controlling the computer based on cursor properties in addition to the position of the cursor—the invention ***does not rely solely on cursor position.*** The claims were amended to reflect this aspect of the invention. *See, e.g.*, *id*. at 2 (Dkt. No. 146 at 56) (amending pending claim 1, issued Claim 1, to recite "detecting at least one property of an external cursor and position of the external cursor" (added language underlined)), 3 (Dkt. No. 146 at 57) (amending pending claim 19, issued Claim 17, to recite "processing the image to determine position and at least one property of the external cursor" (added language underlined)).

The prosecution history statements do not satisfy the exacting standards required for disclaimer of position-based motion from "patterns of movement" or "movement pattern" to narrowly define "property" as Defendants suggest. *See Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1324–26 (Fed. Cir. 2003) (to qualify as a disclaimer, a statement must be "so unmistakable as to be unambiguous evidence of disclaimer").

Accordingly, the Court rejects Defendants' "not based on position" limitation and construes the "At Least One Property" Terms as follows:

- "at least one property" means "at least one property that is not position";
- "at least one . . . property" means "at least one . . . property that is not position"; and
- "at least one . . . properties" means "at least one . . . properties that is not position."

D. "a processor . . . for processing . . ."

Disputed Term	Plaintiff's Proposed Construction	Defendant's Proposed Construction
"a processor . . . for processing . . ." • Claim 24	Plain and ordinary meaning. Not governed by 35 U.S.C. § 112, ¶ 6. If § 112, ¶ 6 applies: **Function:** • "processing the image to detect position of the optical cursor and at least one property of the optical cursor and for converting the position and at least one property to corresponding commands." **Structure:** • a processor	Indefinite. Governed by 35 U.S.C. § 112, ¶ 6. **Function:** • "processing the image to detect position of the optical cursor and at least one property of the optical cursor and for converting the position and at least one property to corresponding commands to control the computer and move an internal cursor to a position corresponding to the optical cursor while the optical cursor remains within the output displayed on the screen" **Structure:** • indefinite

The Parties' Positions

Plaintiff submits that the term does not invoke 35 U.S.C. § 112, ¶ 6 because "processor" denotes sufficient structure—a "computer"—for performing the recited function of "processing." Dkt. No. 143 at 27–28. Plaintiff argues that the meaning of "processor" as a structure for processing is well-understood as shown by dictionary definitions and judicial constructions of the term "processor." *Id*. Plaintiff further submits that the '214 Patent discloses specific examples of image processing and an exemplary algorithm for detecting the position of the optical cursor. *Id*. at 28–29 (citing '214 Patent cols.4–7). Plaintiff notes that the patent references "known imaging processing techniques" disclosed in the *Machine Vision* reference. *Id*. at 29

(citing ’214 Patent col.4 ll.49–62). Thus, Plaintiff argues, even if the term invoked § 112, ¶ 6, the patent discloses sufficient structure and the term does not render the claim indefinite. *Id*.

In addition to the claims themselves, Plaintiff cites the following intrinsic and extrinsic evidence to support its position. **Intrinsic evidence**: ’214 Patent col.3 ll.46–47, 52–55, cols.4–7, col.7 ll.28–60. **Extrinsic evidence**: *IBM Dictionary of Computing* (10th ed. 1994) (“processor”) (Plaintiff’s Ex. 4, Dkt. No. 148 at 11–16); *Webster’s New World Dictionary of Computer Terms* (5th ed. 1994) (“processor”) (Plaintiff’s Ex. 4, Dkt. No. 148 at 32–37); *Webster’s Ninth New Collegiate Dictionary* (1986) (“processor”) (Plaintiff’s Ex. 4, Dkt. No. 148 at 38–47).

Defendants respond that the term invokes 35 U.S.C. § 112, ¶ 6 because “processor” does not connote sufficient structure to perform the recited functions of (1) “***processing*** the image to detect position of the optical cursor and at least one property of the optical cursor” and (2) “***converting*** the position and at least one property to corresponding commands to control the computer and move an internal cursor to a position corresponding to the optical cursor while the optical cursor remains within the output displayed on the screen.” Dkt. No. 156 at 26 (emphasis in original). Defendants further respond that courts, including this Court and the Federal Circuit, have recognized that “processor” alone does not connote sufficient structure to perform such specialized functions and therefore, the term must be analyzed under § 112, ¶ 6. *Id*. at 26–27. Defendants also claim that both Plaintiff’s and Defendants’ experts testified that a general-purpose processor cannot perform the recited functions without being specially programmed. *Id*. at 28.

According to Defendants, the term fails the requirement of § 112, ¶ 6 and therefore Claim 24 is invalid as indefinite. *Id*. at 29–31. Defendants first argue that the function of the claim requires both the “processing” and “converting” functions recited in the claim, not the

abbreviated function that Plaintiff proposes in the alternative. *Id*. at 29. Defendants next argue that because a processor must be specially programmed to perform the recited functions, the '214 Patent must disclose an algorithm that the processor preforms to accomplish the function. *Id*. at 29–30. Defendants contend that the '214 Patent's citation to the *Machine Vision* reference is not sufficient disclosure of an algorithm to perform the function of "processing the image to detect . . . at least one property of the optical cursor" and that the patent does not otherwise disclose any such algorithm. *Id*. at 30. Defendants further contend that the '214 Patent does not disclose an algorithm to perform the "converting" function. *Id*. at 31. Defendants conclude that because the patent does not disclose an algorithm adequate to perform the recited functions, Claim 24 fails the requirement of § 112, ¶ 6. *Id*. at 30–31.

In addition to the claims themselves, Defendants cite the following intrinsic and extrinsic evidence to support their position. **Intrinsic evidence**: '214 Patent col.4 ll.57–65. **Extrinsic evidence**: Russ Dep. (Defendants' Ex. B, Dkt. No. 156-3); Kitchen Decl. (Dkt. No. 156-11).

Plaintiff replies that Defendants have failed to rebut the presumption that § 112, ¶ 6 does not apply to a claim term that lacks "means" or "step for" language. Dkt. No. 164 at 10–11. Plaintiff argues that the claim recites a "processor in communication with the camera" and that the addition of "in communication with the camera" results in a special-purpose computer with sufficient structure to avoid invoking § 112, ¶ 6. Plaintiff contends that even if § 112, ¶ 6 applies there is no need for a detailed description of an algorithm to perform the recited functions as "it would have been within the ordinary skill in the art to generate [such] algorithms." *Id*. at 11.

Plaintiff cites further intrinsic and extrinsic evidence to support its position: **Intrinsic evidence**: '214 Patent col.4 ll.39–41, col.4 ll.52 – col.7 l.27, col.8 ll.21 – col.9 l.25, fig.3.

Extrinsic evidence: Kitchen Dep. (Plaintiff's Ex. E, Dkt. No. 165-2 & Dkt. No. 176-1); Russ Supp. Decl. (Dkt. No. 164-1).

Analysis

The dispute centers on whether this term is governed by § 112, ¶ 6. Because the Court finds that the "processor . . . for . . ." language connotes sufficiently definite structure to one of ordinary skill in the art, the Court concludes that § 112, ¶ 6 does not apply. And because Defendants' indefiniteness argument is premised on the application of § 112, ¶ 6, Defendants have failed to establish by clear and convincing evidence that this term is indefinite and renders any claim invalid.

The Court has previously considered whether "processor"—without the term "means"—invokes § 112, ¶ 6. For example, in *Personal Audio*, the Court held that § 112, ¶ 6 was invoked based in part on *Aristocrat Techs. Australia Pty Ltd. v. Int'l Game Tech.*, 521 F.3d 1328 (Fed. Cir. 2008). *See Personal Audio, LLC v. Apple Inc.*, No. 9:09-cv-00111, 2011 U.S. Dist. LEXIS 157778, at *60–*63, *68–*72, n.13 (E.D. Tex. Jan. 30, 2011). The Court in *Personal Audio* read *Aristocrat* to hold that when a claim discloses a "processor" alone it does not connote sufficient structure to avoid invoking § 112, ¶ 6. *Personal Audio*, 2011 U.S. Dist. LEXIS 157778, at *68–*70 (citing *Aristocrat*, 521 F.3d at 1333, 1336).

Since *Personal Audio*, however, the Federal Circuit has clarified *Aristocrat*. The Federal Circuit held in *Apple* that the *Aristocrat* rule applies only after § 112, ¶ 6 has been invoked. The *Aristocrat* rule should not apply when determining whether § 112, ¶ 6 should be invoked. *See Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1298 (Fed. Cir. 2014). In *Apple*, the Federal Circuit stated:

> The district court misapplied our precedent by requiring the claim limitations of the '949 patent themselves to disclose a step-by-step algorithm as required by

> *Aristocrat Technologies*. *Aristocrat* and related cases hold that, ***if a patentee has invoked computer-implemented means-plus-function claiming***, the corresponding structure in the specification for the computer implemented function must be an algorithm unless a general purpose computer is sufficient for performing the function. . . .
>
> In all these cases, the claims recited the term "means," thereby expressly invoking means-plus-function claiming. In addition, the parties in these cases did not dispute on appeal that these claims were drafted in means-plus-function format. ***Hence, where a claim is not drafted in means-plus-function format, the reasoning in the* Aristocrat *line of cases does not automatically apply, and an algorithm is therefore not necessarily required***. The correct inquiry, when 'means' is absent from a limitation, is whether the limitation, read in light of the remaining claim language, specification, prosecution history, and relevant extrinsic evidence, has sufficiently definite structure to a person of ordinary skill in the art.

Id. (quotation marks omitted, first emphasis in original, second emphasis added). The Federal Circuit has later held that the presumption against application of § 112, ¶ 6 is not "strong." *See Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1349 & n.3 (Fed. Cir. 2015) (*en banc* in relevant portion). However, it has not altered its holding that the *Aristocrat* rule does not apply when determining if § 112, ¶ 6 should be invoked.

The Court considered whether the term "processor" without "means" invoked § 112, ¶ 6 after *Apple*. *See Smartflash LLC v. Apple Inc.*, 77 F. Supp. 3d 535 (E.D. Tex. Dec. 4, 2014). In *Smartflash*, the Court held that an alleged infringer did not show that § 112, ¶ 6 should be invoked. *Id*. at 543. The Court noted that like "detector" and "circuit," "processor," while it "may not define a specific structure, [] describes a class of structures." *Id*. (citing *Personalized Media Commc'ns, L.L.C. v. International Trade Comm'n*, 161 F.3d 696, 705 (Fed. Cir. 1998) (detector); *Linear Tech. Corp. v. Impala Linear Corp.*, 379 F.3d 1311, 1320 (Fed. Cir. 2004) (circuit)). The Court therefore found that "processor" was not a nonce word like "means," "element," or "device." *Id*. The Court reaffirmed this holding in later rulings. *See Smartflash*

LLC v. Apple Inc., No. 6:13-cv-447-JRG-JNM, 2015 U.S. Dist. LEXIS 91669, at *7–*10 (E.D. Tex. July 7, 2015) (finding processor not a nonce word after *Williamson*).

Personalized Media and *Linear Technology* are instructive. In *Personalized Media*, the Federal Circuit reversed the International Trade Commission's holding that the term "digital detector for [performing a function]" was governed by § 112, ¶ 6 and that the claim was indefinite for lack of structure. *Personalized Media Commc'ns*, 161 F.3d at 700–01, 703–707. The Federal Circuit held that "'detector' had a well-known meaning to those of skill in the electrical arts connotative of structure." *Id*. at 704–05 & n.12 (citing dictionary definitions of detector). The Federal Circuit went on to explain that,

> neither the fact that a 'detector' is defined in terms of its function, nor the fact that the term 'detector' does not connote a precise physical structure in the minds of those of skill in the art detracts from the definiteness of structure. . . . Even though the term 'detector' does not specifically evoke a particular structure, it does convey to one knowledgeable in the art a variety of structures known as 'detectors.' We therefore conclude that the term 'detector' is a sufficiently definite structural term to preclude the application of § 112, P 6.

Id.

Similarly, in *Linear Technology*, the Federal Circuit reversed a district court's holding that "circuit for [performing a function]" terms were governed by § 112, ¶ 6. *Linear Tech.*, 379 F.3d at 1319–21. The court determined that:

> Technical dictionaries, which are evidence of the understandings of persons of skill in the technical arts, plainly indicate that the term 'circuit' connotes structure. . . . For example, *The Dictionary of Computing* 75 (4th ed. 1996) defines "circuit" as "the combination of a number of electrical devices and conductors that, when interconnected to form a conducting path, fulfill some desired function." . . . Thus, when the structure-connoting term "circuit" is coupled with a description of the circuit's operation, sufficient structural meaning generally will be conveyed to persons of ordinary skill in the art, and § 112 P 6 presumptively will not apply.

Id. at 1320. Because the claims themselves included the "objectives or operations" of the circuit and because "persons of ordinary skill in the art would understand the structural arrangements of

circuit components from the term 'circuit' coupled with the qualifying language of [the] claim[s]," the court held that § 112, ¶ 6 did not apply. *Id*. at 1320–21.

Here, the Court finds that § 112, ¶ 6 does not apply for three reasons. First, "processor" connotes structure. *See, e.g.*, *IBM Dictionary of Computing* (10th ed. 1994) (Plaintiff's Ex. 4, Dkt. No. 148 at 15) (defining "processor" as "(l) In a computer, a functional unit that interprets and executes instructions. A processor consists of at least an instruction control unit and an arithmetic and logic unit. (T) (2) One or more integrated circuits that process coded instructions and perform a task"); *Webster's New World Dictionary of Computer Terms* 464 (5th ed. 1994) (Plaintiff's Ex. 4, Dkt. No. 148 at 32–37) (defining "processor" as "(1) The CENTRAL PROCESSING UNIT of a computer"). These definitions are analogous to the dictionary definitions relied on by the *Linear Technology* court. *See Linear Tech.*, 379 F.3d at 1320 (defining "circuit" as "the combination of a number of electrical devices and conductors that, when interconnected to form a conducting path, fulfill some desired function."); *see also Personalized Media Commc'ns*, 161 F.3d at 704–05 (finding that "detector" connotes a class of structures").

Second, Claim 24 itself recites the objectives and operations of the processor in the "processor . . . for" limitation:

> processing the image to detect position of the optical cursor and at least one property of the optical cursor and for converting the position and at least one property to corresponding commands to control the computer and move an internal cursor to a position corresponding to the optical cursor while the optical cursor remains within the output displayed on the screen.

'214 Patent, col.11 l.34 – col.12 l.6; *see also Linear Tech.*, 379 F.3d at 1320 (holding that the objectives and outputs of the "circuit for monitoring a signal from the output terminal to generate a first feedback signal" limitation are "monitoring a signal from the output terminal" and "generating a first feedback signal").

Third, one of ordinary skill in the art would understand the structural arrangements of the processor from the recited objectives and operations of the processor. *See, e.g.*, Russ Decl. ¶¶ 26–28 (stating that the one of skill in the art would know "how to determine the position and other properties of an external cursor" and "how to use the position and other external cursor properties to generate commands for a computer, including to generate commands to move an internal cursor to a position corresponding to the position of the external cursor"); Kitchen Dep. 31:7 – 33:21 (testifying that one skilled in the art could create an image-processing algorithm to detect the shape and position of a cursor and to convert the data to commands to control a computer), 37:14 – 38:25 (testifying that one skilled in the art could create an image-processing algorithm to generate a command based on a change in intensity or color of the cursor); *see also Linear Tech.*, 379 F.3d at 1320 (relying on the patentee's expert's statement "that a person of ordinary skill in the art reading the claims would have an understanding of, and would be able to draw, structural arrangements of the circuit elements defined by the claims" (quotation marks omitted)).

Defendants' attempt to overcome the presumption that § 112, ¶ 6 does not apply to the "processor . . . for [performing a function]" term fails because it is premised on requiring an *Aristocrat*-level disclosure in the claims themselves. Dkt. No. 156 at 28. Federal Circuit precedent does not require this level of disclosure in the claims. *See Apple*, 757 F.3d at 1298.

Accordingly, the Court finds that § 112, ¶ 6 does not apply to the "a processor . . . for processing . . ." terms, and that Defendants have not established by clear and convincing evidence that the term renders any claim indefinite. The term has its plain and ordinary meaning and needs no further construction.

E. The "Instructions For" Terms

Disputed Term	Plaintiff's Proposed Construction	Defendant's Proposed Construction
"instructions for detecting . . ." • Claim 25	Plain and ordinary meaning. Not governed by 35 U.S.C. § 112, ¶ 6. If § 112, ¶ 6 applies: **Function:** • "detecting at least one of the user selectable properties of the external cursor" **Structure:** • Computer readable storage medium that includes processor instructions to convert optical data to digital data representing instructions executable by a computer for "detecting at least one of the user selectable properties of the external cursor."	Indefinite. Governed by 35 U.S.C. § 112, ¶ 6. **Function:** • "detecting at least one of the user selectable properties of the external cursor" **Structure:** • indefinite
"instructions for generating . . ." • Claim 25	Plain and ordinary meaning. Not governed by 35 U.S.C. § 112, ¶ 6. If § 112, ¶ 6 applies: **Function:** • "generating a command for the computer based on the at least one detected property of the eternal cursor" **Structure:** • Computer readable storage medium that includes data representing instructions executable by a computer to convert the digital data into a command, or otherwise "generating a command for the computer based on the at least one detected property of the eternal cursor."	Indefinite. Governed by 35 U.S.C. § 112, ¶ 6. **Function:** • "generating a command for the computer based on the at least one detected property of the external cursor" **Structure:** • indefinite

Disputed Term	Plaintiff's Proposed Construction	Defendant's Proposed Construction
"instructions for processing . . ." • Claim 26	Plain and ordinary meaning. Not governed by 35 U.S.C. § 112, ¶ 6. If § 112, ¶ 6 applies: **Function:** • "processing an image of the output to detect at least one property of the external cursor and position of the external cursor relative to the output" **Structure:** • Computer readable storage medium that includes processor instructions to convert optical data to digital data representing instructions executable by a computer for "processing an image of the output to detect at least one property of the external cursor including [and] position of the external cursor relative to the output."	Indefinite. Governed by 35 U.S.C. § 112, ¶ 6. **Function:** • "processing an image of the output to detect at least one property of the external cursor including position of the external cursor relative to the output" **Structure:** • indefinite
"instructions for converting . . ." • Claim 26	Plain and ordinary meaning. Not governed by 35 U.S.C. § 112, ¶ 6. If § 112, ¶ 6 applies: **Function:** • "converting position and the at least one property to a command to control the computer to move an internal cursor to a position corresponding to the external cursor" **Structure:** • Computer readable storage medium that includes data representing instructions executable by a computer to convert the digital data into a command, or otherwise for "converting position and the at least one property to a command to control the computer to move an internal cursor to a position corresponding to the external cursor."	Indefinite. Governed by 35 U.S.C. § 112, ¶ 6. **Function:** • "converting the position and the at least one property to a command to control the computer to move an internal cursor to a position corresponding to the external cursor" **Structure:** • indefinite

Because the parties' arguments and proposed constructions with respect to these terms are related, the Court addresses the terms together.

The Parties' Positions

Plaintiff submits that Claims 25 and 26 are *Beauregard*[6] claims and that, the "instructions" of the terms refers to computer program instructions for performing the recited processes. Dkt. No. 143 at 31–32. Plaintiff further submits that the instructions should not be severed from the structure recited in the preamble, the "computer readable medium." *Id*. at 32. Plaintiff finally submits, the structure is sufficiently definite to avoid application of 35 U.S.C. § 112, ¶ 6. *Id*.

Plaintiff contends that if the terms are construed according to § 112, ¶ 6, then the structure for the "instructions for detecting . . ." and the "instructions for processing . . ." limitations are found in the claims in conjunction with the disclosures at "Fig. 3 box 60 (boxes 62, 64, 66, 68, 70, and 72); 3:41-61; 4:54-65; 4:65 – 7:4; 7:5-43; 8:12-35." *Id*. at 33. Furthermore, the structure for the "instructions for generating . . ." and the "instructions for converting . . ." limitations are found in the claims in conjunction with the disclosure at: "Fig. 3 (box 74) and 3:41-61; 7:44-60; 8:33-67."

In addition to the claims themselves, Plaintiff cites the following intrinsic and extrinsic evidence to support its position. **Intrinsic evidence**: '214 Patent col.3 ll.41–61, col.4 ll.54 – col.7 l.60, col.8 ll.12–67, fig.3. **Extrinsic evidence**: Russ Decl. (Plaintiff's Ex. 5, Dkt. No. 144).

[6] Named after *In re Beauregard*, 53 F.3d 1583 (Fed. Cir. 1995), "[c]laims in *Beauregard* format formally recite a tangible article of manufacture—a computer-readable medium, such as a computer disk or other data storage device—but such claims also require the device to contain a computer program for directing a computer to carry out a specified process." *CLS Bank Int'l v. Alice Corp. Pty*, 717 F.3d 1269, 1287 (Fed. Cir. 2013)

Defendants respond that the word "instructions" is a generic placeholder that does not connote sufficient structure to perform the recited functions, and therefore, the term must be analyzed under § 112, ¶ 6. Dkt. No. 156 at 31. Defendants argue that because the "instruction" limitations are software for a specially programmed computer, the '214 Patent must disclose algorithms for performing the functions. *Id*. at 33–35. Defendants also respond that the patent's references to "known image-processing techniques" and the *Machine Vision* reference do not qualify as a disclosure of adequate structure. *Id*. Therefore, Defendants contend, as the patent does not disclose the requisite algorithms, the claims fail. *Id*.

In addition to the claims themselves, Defendants cite the following intrinsic and extrinsic evidence to support their position. **Intrinsic evidence**: '214 Patent col.3 ll.45–46, col.3 ll.52–55, col.4 ll.57–67, col. 7 ll.16–27, col.7 ll.35–37, col.8 ll.21–22, fig.3. **Extrinsic evidence**: Kitchen Decl. (Dkt. No. 156-11); .

Plaintiff replies that applying § 112, ¶ 6 is inappropriate for a *Beauregard* claim, and such application is unsupported by any legal authority. Dkt. No. 164 at 12.

Analysis

The dispute here largely parallels the dispute over the "processor . . . for . . ." terms. Defendants argue that: (1) 35 U.S.C. § 112, ¶ 6 applies to each of the "instructions for" terms, (2) the '214 Patent does not adequately disclose structure and therefore fails the requirements of the statute, and (3) Claims 25 and 26 are invalid as indefinite. For similar reasons to those expressed in the analysis of the "processor . . . for . . ." term, the Court determines that Defendants argument fails on its first point—§ 112, ¶ 6 does not apply. The "instructions for . . ." language connotes sufficiently definite structure to one of ordinary skill in the art, therefore the statute does not apply.

Here, the term "instructions," like "detector" in *Personalized Media* and "circuit" in *Linear Technology*, connotes sufficiently definite structure to avoid invoking §112, ¶ 6. First, "instruction" connotes structure. *See, e.g.*, '214 Patent col.12 ll.7–9 ("A computer readable storage medium having stored data representing instructions executable by a computer to generate commands to control a cursor."); *Webster's Ninth New Collegiate Dictionary* 627 (1986) (Dkt. No. 148 at 43) (defining "instruction" as "a code that tells a computer to perform a particular operation"); Kitchen Decl. ¶ 63 ("instructions" refers to "executable processor instructions" or "program code to be converted to processor instructions") (Dkt. No. 156-11 at 20); *Affymetrix, Inc. v. Hyseq, Inc.*, 132 F. Supp. 2d 1212, 1231–33 (N.D. Cal. 2001) (finding that "code" connotes structure); *Trading Techs. Int'l v. eSpeed, Inc.*, No. 04-c-5312, 2006 U.S. Dist. LEXIS 80153, at *38–*40 (N.D. Ill. Oct. 31, 2006) (finding that "code" connotes structure); *Affinity Labs of Texas, LLC v. Samsung Elecs. Co.*, No. 1:12-cv-557, 2014 U.S. Dist. LEXIS 184075, at *12–*13 (E.D. Tex. June 4, 2014) (Clark, J.) (finding that "software" connotes structure).

Second, Claims 25 and 26 themselves recite the objectives and operations of the instructions in the "Instructions For" limitations:

- detecting at least one of the user selectable properties of the external cursor (Claim 25),
- generating a command for the computer based on the at least one detected property of the external cursor (Claim 25),
- processing an image of the output to detect at least one property of the external cursor including position of the external cursor relative to the output (Claim 26),
- converting the position and the at least one property to a command to control the computer to move an internal cursor to a position corresponding to the external cursor (Claim 26).

'214 Patent, col.12 ll.14–18, ll.26–33; *see also Linear Tech.*, 379 F.3d at 1320 (holding that the objectives and outputs of the "circuit for monitoring a signal from the output terminal to generate

a first feedback signal" limitation are "monitoring a signal from the output terminal" and "generating a first feedback signal").

Third, one of ordinary skill in the art would understand the structural arrangements of the instructions from the recited objectives and operations of the instructions. *See, e.g.*, Russ Decl. ¶¶ 26–28 (stating that the one of skill in the art would know "how to determine the position and other properties of an external cursor" and "how to use the position and other external cursor properties to generate commands for a computer, including to generate commands to move an internal cursor to a position corresponding to the position of the external cursor"); Kitchen Dep. 31:7 – 33:21 (testifying that one skilled in the art could create an image-processing algorithm to detect the shape and position of a cursor and to convert the data to commands to control a computer), 37:14 – 38:25 (testifying that one skilled in the art could create an image-processing algorithm to generate a command based on a change in intensity or color of the cursor); *see also Linear Tech.*, 379 F.3d at 1320 (relying on the patentee's expert's statement "that a person of ordinary skill in the art reading the claims would have an understanding of, and would be able to draw, structural arrangements of the circuit elements defined by the claims" (quotation marks omitted)).

Numerous district courts have come to the same conclusion on similar terms. *See, e.g.*, *Affymetrix, Inc. v. Hyseq, Inc.*, 132 F. Supp. 2d 1212, 1231–33 (N.D. Cal. 2001) (holding that § 112, ¶ 6 does not apply to the claim term "computer code that [performs a function]"); *Trading Techs. Int'l v. eSpeed, Inc.*, No. 04-c-5312, 2006 U.S. Dist. LEXIS 80153, at *34–*44 (N.D. Ill. Oct. 31, 2006) (holding that § 112, ¶ 6 does not apply to the claim term "program code for [performing a function]"); *Versata Software, Inc. v. Sun Microsystems, Inc.*, No. 2:06-cv-358, 2008 U.S. Dist. LEXIS 63645, at *36–*37 (E.D. Tex. Aug. 19, 2008) (holding that § 112, ¶ 6

does not apply to the claim term "computer readable program code configured to cause a computer to [perform a function]"); *Aloft Media, LLC v. Adobe Sys.*, 570 F. Supp. 2d 887, 897–98 (E.D. Tex. 2008) (holding that § 112, ¶ 6 does not apply to the claim term "computer code for [performing a function]"); *Eolas Techs., Inc. v. Adobe Sys., Inc.*, 810 F. Supp. 2d 795, 810 (E.D. Tex. 2011) (holding that § 112, ¶ 6 does not apply to the claim term "computer readable program code for [performing a function]"); *RLIS, Inc. v. Allscripts Healthcare Solutions, Inc.*, No. 3:12-cv-208, 2013 U.S. Dist. LEXIS 98840, at *41–*48 (S.D. Tex. July 16, 2013) (holding that § 112, ¶ 6 does not apply to the claim terms "executable software [for performing a function]" and "computer software for [performing a function]"); *Affinity Labs of Texas, LLC v. Samsung Elecs. Co.*, No. 1:12-cv-557, 2014 U.S. Dist. LEXIS 184075, at *11–*18 (E.D. Tex. June 4, 2014) (Clark, J.) (holding that § 112, ¶ 6 does not apply to the claim term "software . . . configured to [perform a function]"); *SuperSpeed, LLC v. Google, Inc.*, No. H-12-1688, 2014 U.S. Dist. LEXIS 4479, at *72–*79 (S.D. Tex. Jan. 14, 2014) (holding that § 112, ¶ 6 does not apply to the claim term "executable . . . code for [performing a function]").

Defendants' attempt to overcome the presumption that § 112, ¶ 6 does not apply to the "Instructions For" terms fails because it is premised on requiring an *Aristocrat*-level disclosure in the claims themselves. Dkt. No. 156 at 33–35. But that premise is contrary to law. *Apple*, 757 F.3d at 1298. Because the statute does not apply, Defendants' argument that Claims 25 and 26 are indefinite because they fail to comply with the statute is moot.

The Court finds that § 112, ¶ 6 does not apply to the "Instructions For" terms, that Defendants have not established by clear and convincing evidence that the terms render any claim indefinite, and that the terms have their plain and ordinary meaning and need no further construction.

V. CONCLUSION

The Court adopts the above constructions set forth in this opinion for the disputed and agreed terms of the '214 Patent. The parties are ordered that they may not refer, directly or indirectly, to each other's claim construction positions in the presence of the jury. Likewise, the parties are ordered to refrain from mentioning any portion of this opinion, other than the actual definitions adopted by the Court, in the presence of the jury. Any reference to claim construction proceedings is limited to informing the jury of the definitions adopted by the Court.

SIGNED this 5th day of January, 2016.

ROY S. PAYNE
UNITED STATES MAGISTRATE JUDGE